

factors are applied. Emissions include sidebands, spurious emissions and radio frequency harmonics. Attenuation is to be measured at the output terminals of the transmitter (including any filters that may be employed). In the event of interference caused to any service, greater attenuation may be required.

NOTE TO PARAGRAPH (H): Greater attenuation may be required for situations where the DTV station and an adjacent channel analog TV station serve the same area and there are expected to be locations within that shared area where the analog TV station's field strength is less than 12 dB above the DTV station's field strength.

[62 FR 26712, May 14, 1997]

§ 73.623 DTV applications and changes to DTV allotments.

(a) *General.* This section contains the technical criteria for evaluating applications requesting DTV facilities that do not conform to the provisions of § 73.622 and petitions for rule making to amend the DTV Table of Allotments (§ 73.622(b)). Petitions to amend the DTV Table (other than those also expressly requesting amendment of this section) and applications for new DTV broadcast stations or for changes in authorized DTV stations filed pursuant to this section will not be accepted for filing if they fail to comply with the requirements of this section.

(b) In considering petitions to amend the DTV Table and applications filed pursuant to this section, the Commission will use geographic coordinates defined in § 73.622(d) as reference points in determining allotment separations and evaluating interference potential.

(c) *Minimum technical criteria for modification of DTV allotments included in the initial DTV Table of Allotments and for applications filed pursuant to this section.* No petition to modify a channel allotment included in the initial DTV Table or application for authority to construct or modify a DTV station, filed pursuant to this section, will be accepted unless it shows compliance with the requirements of this paragraph.

(1) Requests filed pursuant to this paragraph must demonstrate compliance with the principal community coverage requirements of § 73.625(a).

(2) Requests filed pursuant to this paragraph must demonstrate that there is no increase in the amount of interference caused to any other DTV broadcast station, DTV allotment, or analog TV broadcast station. For evaluating compliance with this requirement, interference is to be predicted based on the procedure set forth in Appendix B of the *Sixth Report and Order* in MM Docket 87-268, FCC 97-115, adopted April 3, 1997, including service areas determined in accordance with § 73.622(e), consideration of whether F(50,10) undesired signals will exceed the following desired-to-undesired (D/U) signal ratios, assumed use of a directional receiving antenna, and use of the terrain dependent Longley-Rice point-to-point propagation model. Guidance for evaluating interference using the Longley-Rice methodology is provided in *OET Bulletin No. 69*. Copies of the *Sixth Report and Order* and *OET Bulletin No. 69* may be inspected during normal business hours at the: Federal Communications Commission, 1919 M St., NW., Dockets Branch (Room 239), Washington, DC 20554. These documents are also available through the Internet on the *FCC Home Page* at <http://www.fcc.gov>. The threshold levels at which interference is considered to occur are:

	D/U ratio
Co-channel:	
DTV-into-analog TV	+34
analog TV-into-DTV	*+2
DTV-into-DTV	*+15
First Adjacent Channel:	
Lower DTV-into-analog TV	-17
Upper DTV-into-analog TV	-12
Lower analog TV-into-DTV	-48
Upper analog TV-into-DTV	-49
Lower DTV-into-DTV	-42
Upper DTV-into-DTV	-43
Other Adjacent Channel (Channels 14-69 only)	
DTV-into-analog TV, where N = analog TV channel and DTV Channel:	
N-2	-24
N+2	-28
N-3	-30
N+3	-34
N-4	-34
N+4	-25
N-7	-35
N+7	-34
N-8	-32
N+8	-43
N+14	-33
N+15	-31

NOTE TO PARAGRAPH (C)(2): The values for co-channel interference to DTV service are only valid at locations where the signal-to-noise ratio is 28 dB or greater. At the edge of the noise-limited service area, where the signal-to-noise ratio is 16 dB, these values are 21 dB and 23 dB for interference from analog TV and DTV, respectively. Due to the frequency spacing that exists between Channels 4 and 5, between Channels 6 and 7, and between Channels 13 and 14, the minimum adjacent channel technical criteria specified in the table shall not be applicable to these pairs of channels (see § 73.603(a)).

(d)(1) *Minimum geographic spacing requirements for DTV allotments not included in the initial DTV Table of Allotments.* No petition to add a new channel to the DTV Table of Allotments will be accepted unless it demonstrates compliance with the principle community coverage requirements of § 73.625(a) and meets the following requirements for geographic spacing with regard to all other DTV stations, DTV allotments and analog TV stations:

Channel relationship	Separation requirement
VHF Channels 2–13: Co-channel, DTV to DTV	Zone I—244.6 km. Zones II & III—273.6 km.
Co-channel, DTV to analog TV	Zone I—244.6 km. Zone II & III—273.6 km.
Adjacent Channel DTV to DTV	No allotments permitted between: Zone I—40.2 km and 96.6 km. Zones II & III—48.3 km and 96.6 km.
DTV to analog TV	No allotments permitted between: Zone I—11.3 km and 114.3 km. Zone II & III—17.7 km and 146.4 km.

UHF Channels:

City	Channels	Latitude	Longitude
Boston, MA	14, 16	42°21'24"	71°03'25"
Chicago, IL	14, 15	41°52'28"	87°38'22"
Dallas, TX	16	32°47'09"	96°47'37"
Houston, TX	17	29°45'26"	95°21'37"
Los Angeles, CA	14, 16, 20	34°03'15"	118°14'28"

Channel relationship	Separation requirement
Co-channel, DTV to DTV	Zone I—196.3 km Zone II & III—223.7 km.
Co-channel, DTV to analog TV	Zone I—217.3 km. Zone II & III—244.6 km.
Adjacent Channel DTV to DTV	No allotments permitted between: All Zones—32.2 km and 88.5 km.
DTV to analog TV	No allotments permitted between: All Zones—9.7 km and 88.5 km.
Taboo Channels, DTV to analog TV only (DTV channels #2, #3, #4, #7, #8, and 14 or 15 channels above the analog TV channel).	No allotments permitted between: Zone I—24.1 km and 80.5 km Zone II & III 24.1 km and 96.6 km

NOTE TO PARAGRAPH (D)(1): Due to the frequency spacing that exists between Channels 4 and 5, between Channels 6 and 7, and between Channels 13 and 14, the minimum geographic spacing requirements specified in the table shall not be applicable to these pairs of channels (see § 73.603(a)).

(2) Zones are defined in § 73.609. The minimum distance separation between a DTV station in one zone and an analog TV or DTV station in another zone shall be that of the zone requiring the lower separation.

(e) *Protection of land mobile operations on channels 14–20.* The Commission will not accept petitions to amend the DTV Table of Allotments, applications for new DTV stations, or applications to change the channel or location of authorized DTV stations that would use channels 14–20 where the distance between the DTV reference point as defined in § 73.622(d), would be located less than 250 km from the city center of a co-channel land mobile operation or 176 km from the city center of an adjacent channel land mobile operation. Land mobile operations on these channels in the following markets:

City	Channels	Latitude	Longitude
Miami, FL	14	25°46'37"	80°11'32"
New York, NY 1	4, 15	40°45'06"	73°59'39"
Philadelphia, PA	19, 20	39°56'58"	75°09'21"
Pittsburgh, PA	14, 18	40°26'19"	80°00'00"
San Francisco, CA	16, 17	37°46'39"	122°24'40"
Washington, DC	17, 18	38°53'51"	77°00'33"

(f) *Negotiated agreements on interference.* Notwithstanding the minimum technical criteria for DTV allotments specified in paragraph (b) of this section, DTV stations operating on allotments that are included in the initial DTV Table may operate with increased ERP and/or antenna HAAT that would result in additional interference to an analog TV station if that station agrees, in writing, to accept the additional interference. Such agreements must be submitted with the application for authority to construct or modify the DTV station's facilities. The larger service area resulting from such a change of ERP and/or antenna HAAT will be protected in accordance with the provisions of paragraph (c) of this section. Applications submitted pursuant to the provisions of this paragraph will be granted only if the Commission finds that such action is consistent with the public interest.

[62 FR 26719, May 14, 1997]

§ 73.624 Digital Television Broadcast Stations.

(a) Digital television ("DTV") broadcast stations are assigned channels 6 MHz wide. Initial eligibility for licenses for DTV broadcast stations is limited to persons that, as of April 3, 1997, are licensed to operate a full power television broadcast station or hold a permit to construct such a station (or both).

(b) At any time that a DTV broadcast station permittee or licensee transmits a video program signal on its analog television channel, it must also transmit at least one over-the-air video program signal at no direct charge to viewers on the DTV channel that is licensed with the analog channel. The DTV program service provided pursuant to this paragraph must be at least comparable in resolution to the analog television station programming transmitted to viewers on the analog chan-

nel but, subject to paragraph (f) of this section, DTV broadcast stations are not required to simulcast the analog programming.

(c) Provided that DTV broadcast stations comply with paragraph (b) of this section, DTV broadcast stations are permitted to offer telecommunications services of any nature, consistent with the public interest, convenience, and necessity, on an ancillary or supplementary basis. The kinds of services that may be provided include, but are not limited to computer software distribution, data transmissions, teletext, interactive materials, aural messages, paging services, audio signals, subscription video, and any other services that do not derogate DTV broadcast stations' obligations under paragraph (b) of this section. Such services may be provided on a broadcast, point-to-point or point-to-multipoint basis, provided, however, that no video broadcast signal provided at no direct charge to viewers shall be considered ancillary or supplementary.

(1) DTV licensees that provide ancillary or supplementary services that are analogous to other telecommunications services subject to regulation by the Commission must comply with the Commission regulations that apply to those services, provided, however, that no ancillary or supplementary service shall have any rights to carriage under sections 614 or 615 of the Communications Act of 1934, as amended, or be deemed a multichannel video programming distributor for purposes of section 628 of the Communications Act of 1934, as amended.

(2) In all arrangements entered into with outside parties affecting telecommunications service operation, the DTV licensee or permittee must retain control over all material transmitted in a broadcast mode via the station's facilities, with the right to reject any material that it deems inappropriate or